3.2 Session 2 reflection

On input data of your choice, create a single-table database and execute queries on it that match the following criteria. Please show the exact SQL query together with its result in your response. Each step is worth one point for adequate completion.

Additionally, please include in the first response the commands that create and populate the database as well as a brief description of what it represents. You are welcome to reuse parts of what you created for the first session’s reflection.

Design and execute a query that...

1. selects all the values of a specific column;

SELECT Name FROM Product;

Result:

Cheese

Chicken wings

Chicken

Milk

Salmon

Dark Chocolate 70%

2. selects all the rows in which a column matches a specific value;

SELECT \* FROM Distributor

WHERE Name='D&B';

Result:

1|D&B|Montreal|3

3|D&B|Montreal|15

3. selects all the rows that match a conjunction of two conditions;

SELECT \* FROM Banner

WHERE name='La CAGE' AND location='Laval';

Result:

|La CAGE|Laval

4. selects all the rows that match a disjunction of two conditions;

SELECT \* FROM Distributor

WHERE name='D&B' OR location='Montreal';

Result:

1|D&B|Montreal|3

2|GFS|Montreal|3

3|D&B|Montreal|15

5. produces a concatenation of two columns;

SELECT name||category FROM Product;

Result:

Cheese dairy

Chicken wings meats

Chicken meats

Milk dairy

Salmon meat

Dark Chocolate 70% grocery

6. includes a filtering into two or more sub-cases;

SELECT name FROM product WHERE format = 'package kg' AND size >= 2

Result:

Cheese

Salmon

7. orders the rows by a column value in increasing order;

SELECT

name, size

FROM

product

ORDER BY

size ASC,

name DESC

Result:

Chicken|1.5

Milk|2

Dark Chocolate 70%|2.5

Cheese|2.5

Salmon|3

Chicken wings|5

8. shows only the top k > 0 rows with the highest values for a specific column for some fixed values of k;

SELECT

product\_id,

size

FROM

Product

LIMIT 3;

Result:

1|2.5

2|5

3|1.5

9. shows only the bottom k rows with the lowest values for a specific column.

SELECT

product\_id,

name, size

FROM

Product

ORDER BY

size DESC

LIMIT 3;

Result:

2|Chicken wings|5

5|Salmon|3

1|Cheese|2.5

Data Base

CREATE TABLE Product (

product\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR(20),

category VARCHAR(20),

format VARCHAR(20),

size INT);

CREATE TABLE Supplier (

supplier\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR(20),

location VARCHAR(20));

CREATE TABLE Distributor (

distributor\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR(20),

location VARCHAR(20),

quantity INT);

CREATE TABLE Banner (

banner\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR(20),

location VARCHAR(20));

INSERT INTO Product (name, category, format, size) VALUES ('Cheese', 'dairy', 'package kg', 2.5);

INSERT INTO Product (name, category, format, size) VALUES ('Chicken wings', 'meats', 'box kg', 5);

INSERT INTO Product (name, category, format, size) VALUES ('Chicken', 'meats', 'indivdual kg', 1.5);

INSERT INTO Product (name, category, format, size) VALUES ('Milk', 'dairy', 'box L', 2);

INSERT INTO Product (name, category, format, size) VALUES ('Salmon', 'meat', 'package kg', 3);

INSERT INTO Product (name, category, format, size) VALUES ('Dark Chocolate 70%', 'grocery', 'bag kg', 2.5);

INSERT INTO Supplier (name, location) VALUES ('Saputo', 'Longueuil');

INSERT INTO Supplier (name, location) VALUES ('Exceldor', 'Bucherville');

INSERT INTO Supplier (name, location) VALUES ('Agropur', ' Saint-Hyacinthe');

INSERT INTO Supplier (name, location) VALUES ('Highliner', 'N.B');

INSERT INTO Supplier (name, location) VALUES ('BarryCallebault', 'Saint-Hyacinthe');

INSERT INTO Supplier (name, location) VALUES ('Parmalat', 'Magog');

INSERT INTO Distributor ( name, location, quantity) VALUES ('D&B', 'Montreal', 3);

INSERT INTO Distributor (name, location, quantity) VALUES ('GFS', 'Montreal', 3);

INSERT INTO Distributor (name, location, quantity) VALUES ('D&B', 'Montreal', 15);

INSERT INTO Distributor (name, location, quantity) VALUES ('Multiplus', 'Laval', 10);

INSERT INTO Distributor (name, location, quantity) VALUES ('AGD', 'Ontario', 15);

INSERT INTO Distributor (name, location, quantity) VALUES ('Multiplus', 'Laval', 10);

INSERT INTO Distributor (name, location, quantity) VALUES ('Midland', 'Mascouche', 10);

INSERT INTO Banner (name, location) VALUES ('Pizza Hut', 'Montreal');

INSERT INTO Banner (name, location) VALUES ('La CAGE', 'Desjardins');

INSERT INTO Banner (name, location) VALUES ('La CAGE', 'Laval');

INSERT INTO Banner (name, location) VALUES ('café Depot', 'Mc Gill');

INSERT INTO Banner (name, location) VALUES ('Chicken wings', 'LaSalle');

INSERT INTO Banner (name, location) VALUES ('Van Houte', 'Berri Uqam');

Queries

/\* everything\*/

SELECT \* FROM Product;

SELECT \* FROM Supplier;

SELECT \* FROM Distributor;

SELECT \* FROM Banner;

/\* 1 just one column \*/

SELECT Name FROM Product;

/\* 2 name filter \*/

SELECT \* FROM Distributor

WHERE Name='D&B';

/\* 3 \*/

SELECT \* FROM Banner

WHERE name='La CAGE' AND location='Laval';

/\* 4 \*/

SELECT \* FROM Distributor

WHERE name='D&B' OR location='Montreal';

/\* 5 \*/

SELECT name|| ' ' ||category FROM Product;

/\* 6 \*/

SELECT name FROM product WHERE format = 'package kg' AND size >= 2.5;

/\* 7 case filtering \*/

SELECT

name, size

FROM

product

ORDER BY

size ASC;

/\* 8 case filtering \*/

SELECT

product\_id,

size

FROM

Product

LIMIT 3;

/\* 9 \*/

SELECT

product\_id,

name, size

FROM

Product

ORDER BY

size DESC

LIMIT 3;